City of Bellevue
Development Services Department
Land Use Staff Report

Proposal Name:	**Somerset Slope Revegetation & Deck Rebuild**
Proposal Address:	**13607 SE 55th Place**
Proposal Description:	Critical Areas Land Use Permit to address unpermitted reconstruction of an existing two-level deck and vegetation removal within a steep slope critical area buffer. The proposal is supported by a Geotechnical Engineering Report and a Vegetation Restoration Plan for the top-of-slope buffer.
File Number:	**21-10667 LO**
Applicant:	**Mike Chaffee**
Decisions Included:	**Process II**
Planner:	**Kennith George, Associate Planner**
State Environmental Policy Act Threshold Determination:	**Exempt**
Department Decision:	**Approval with Conditions**

For

Elizabeth Stead, Land Use Director
Development Services Department

Application Date:	March 30, 2021
Notice of Application Publication Date:	April 15, 2021
Decision Publication Date:	July 15, 2021
Appeal Deadline:	July 29, 2021

For information on how to appeal a proposal, visit Development Services Center at City Hall or call (425) 452-6800. Appeal of the Decision must be received in the City's Clerk's Office by 5 PM on the date noted for appeal of the decision.

CONTENTS

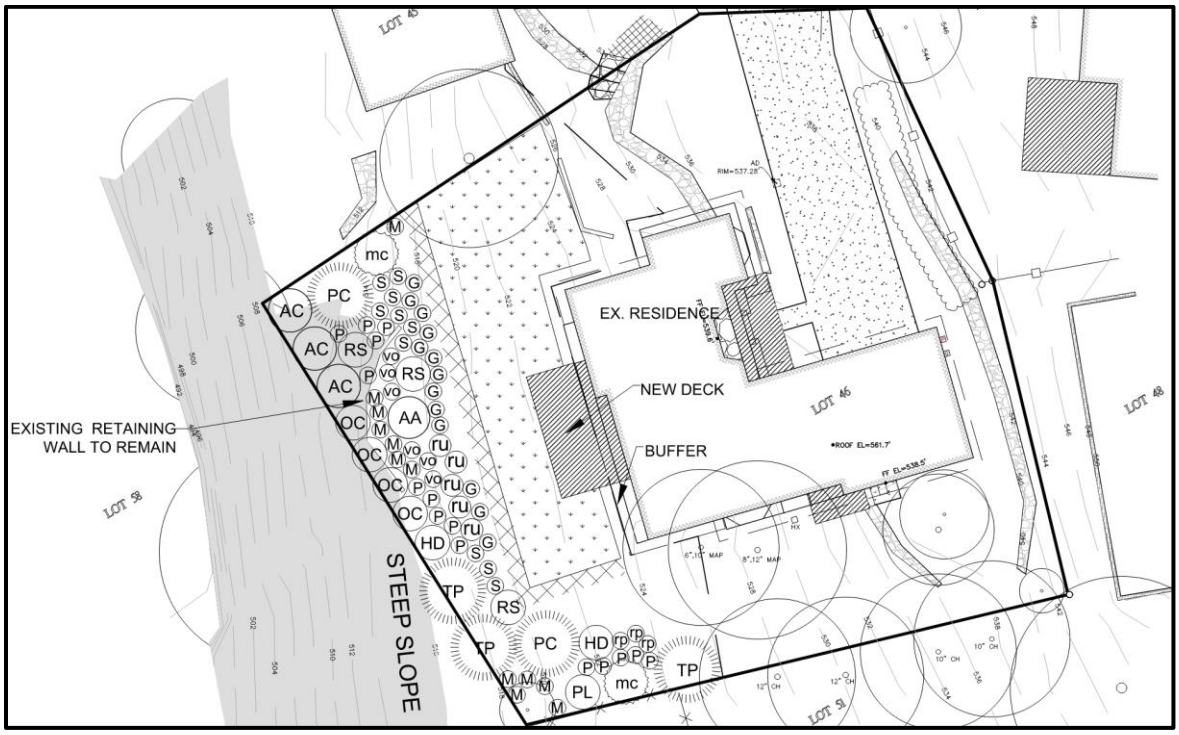
Attachments

1. Building Plan
2. Vegetation Restoration Plan
3. Topographic & Boundary Survey
4. Critical Areas Report – Associated Earth Sciences Inc.

I. Request & Review Process

The applicant has requested Critical Areas Land Use Permit approval to resolve unpermitted reconstruction of an existing deck consisting of two-levels and vegetation removal within a steep slope critical area buffer. The proposed deck is attached to the rear of a single-family residence and in the same general location and size as the existing deck. Proposed activities are located within the code required 50-foot top-of-slope buffer measured from the edge of the steep slope critical area. The proposal includes approximately 3,500 square feet of restoration planting within the buffer to restore the buffer conditions. See Figure 1 for proposed site conditions.

Figure 1



The proposal to modify the steep slope buffer for reconstruction of the existing deck and restoration of the steep slope buffer due to unpermitted vegetation removal requires the approval of a Critical Areas Land Use Permit (CALUP) with a critical areas report, per LUC 20.25H.120.B.3. The critical areas report requirements have been satisfied with the Geotechnical Engineering Report and Vegetation Restoration Plan submitted for this project (Attachments 2 and 4).

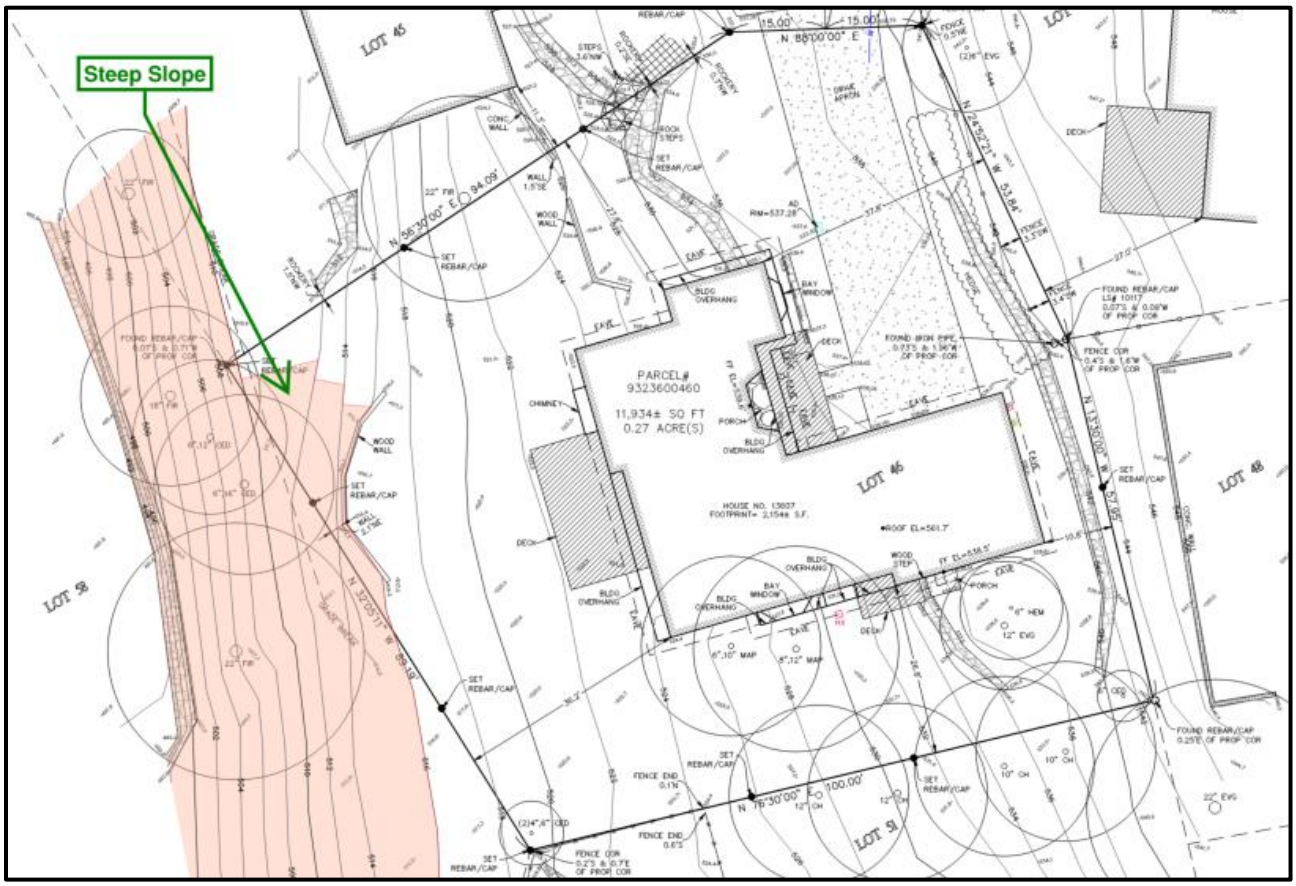
II. Site Context & Description

A. Site Context

The project site is located at 13607 SE 55th Place in the Factoria Subarea and Somerset neighborhood area of Bellevue (parcel #9323600460). The site contains 11,934 square feet of land area and is currently developed with a single-family residence, two-level

deck, and a small railroad tie retaining wall. The site is accessed off SE 55th Place to the north from Highland Drive. A west-facing steep slope critical area is located on the west adjacent property, which is addressed off 5504 136th PL SE. The slope is moderately vegetated with cedar trees, madrone, ivy juniper, and laurel bushes. A small portion of the steep slope comes up the subject site to a point where it meets an existing railroad tie retaining wall. See Figure 2 below for existing topography and steep slope critical area.

Figure 2



The existing vegetation consists of trees, shrubs, and ground cover. Nearly all trees, shrubs and ground cover vegetation were removed from the steep slope buffer. No grading has occurred on the site. See Figure 3 below for previous site conditions and current site conditions. A portion of the existing single-family residence is located in the buffer; however, per LUC 20.25H.035.B, the buffer is modified to exclude the footprint of an existing primary structure that was legally established on the site prior to August 1, 2006. The existing residence was constructed in 1979 according to the King County Assessor records. See Figure 3 below for the site conditions prior to reconstruction of the deck and vegetation removal and see Figure 4 for current site conditions.

Figure 3

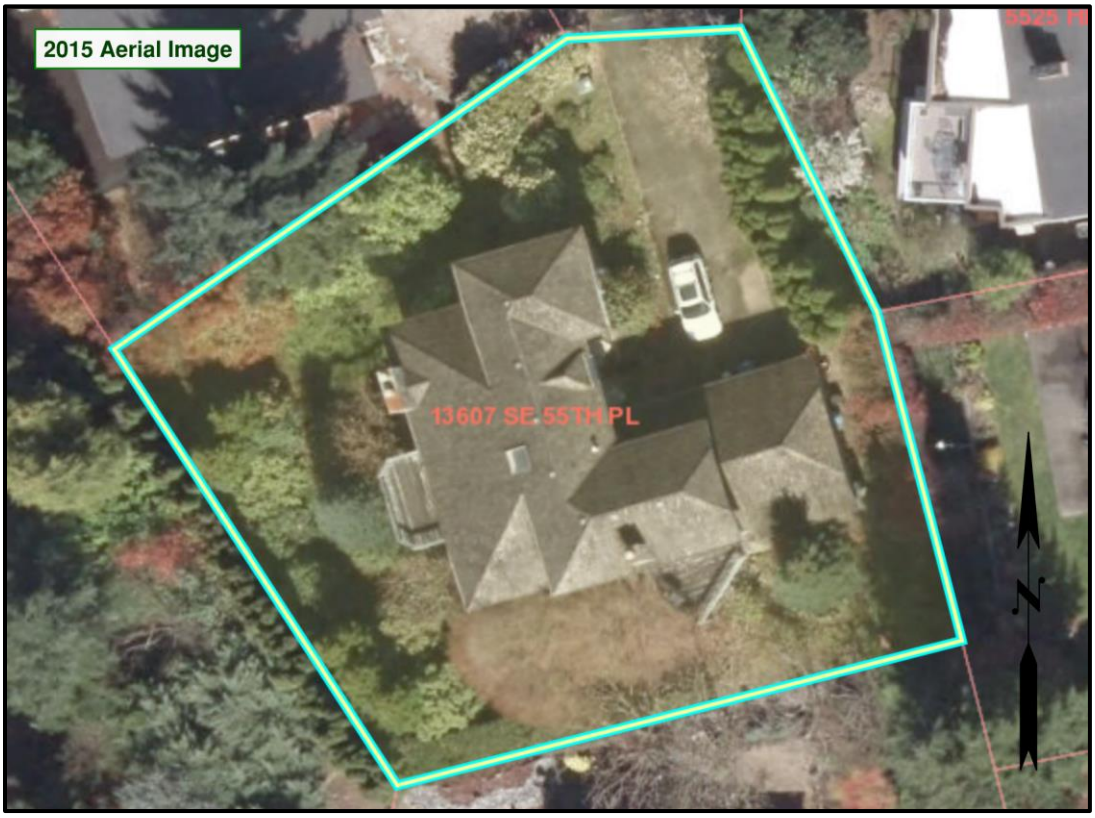
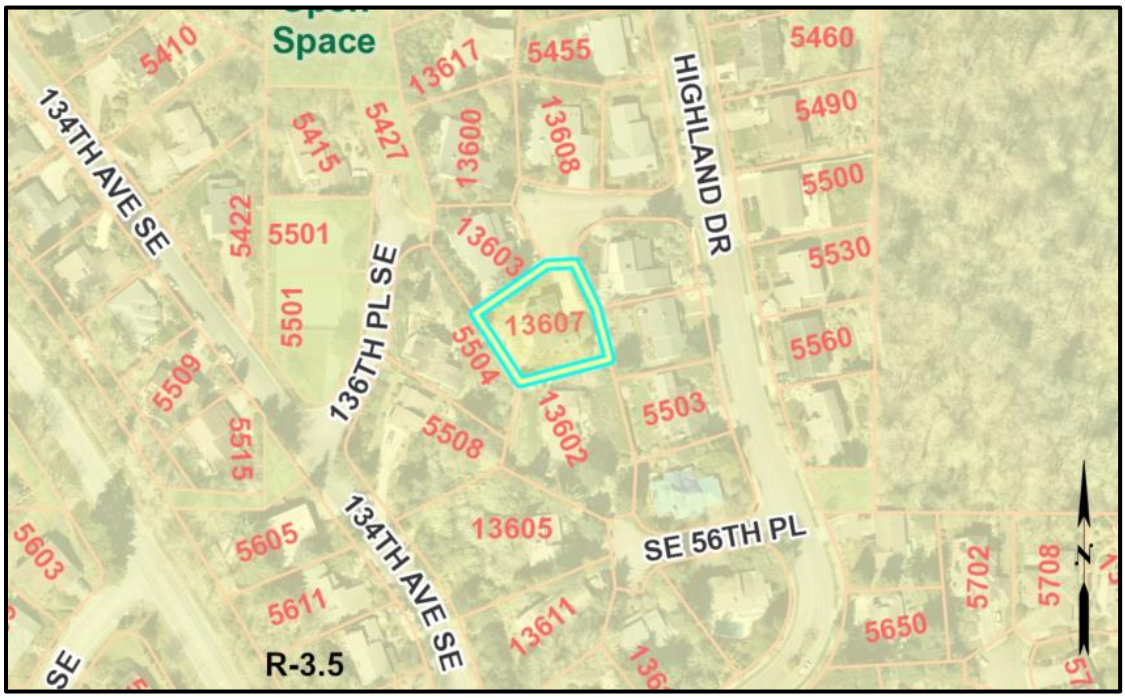


Figure 4

B. Zoning & Subarea

The property is zoned Single-Family Residential District (R-3.5) and is located within the Factoria Subarea of the City's Comprehensive Plan. See Figure 5 for the zoning map.

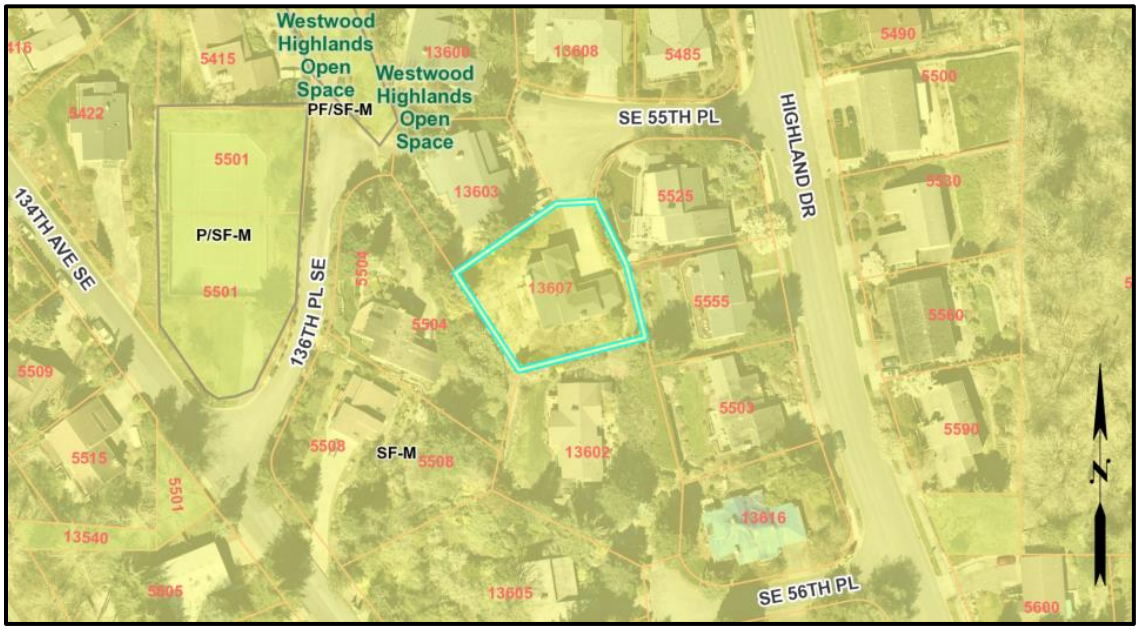
Figure 5



C. Land Use Context

The site has a Comprehensive Plan designation of SF-M, or Single-Family Medium Density. The site is adjacent to residential uses to the north, south, and west. See Figure 6 for Comprehensive Plan designation.

Figure 6



D. Critical Areas Functions and Values

i. Steep Slopes and Geologic Hazards

Geologic hazards pose a threat to the health and safety of citizens when commercial, residential, or industrial development is inappropriately sited in areas of significant hazard. Some geologic hazards can be reduced to mitigated by engineering, design, or modified construction practices. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas is best avoided (WAC 365-190).

Steep slopes may serve several other functions and possess other values for the City and its residents. Several of Bellevue's remaining large blocks of forest are located in steep slopes areas, providing habitat for a variety of wildlife species and important linkages between habitat areas in the City. These steep slopes areas also act as conduits for groundwater, which drains from hillsides to provide a water source for the City's wetlands and stream systems. Vegetated steep slopes also provide a visual amenity in the City, providing a "green" backdrop for urbanized areas enhancing property values and buffering urban development.

III. Consistency with Land Use Code Requirements:

A. Zoning District Dimensional Requirements:

The site is located within the R-3.5 zoning district. Review of the proposal found that applicable dimensional requirements for side and rear yard setbacks, lot coverage, and impervious surface coverage are in compliance with the standards and limitations of LUC 20.20.010. All zoning dimensional standards will be confirmed during review of the required building permit. The City is currently reviewing the building permit application under 20-110087 BR. **See Section IX for Conditions of Approval related to building permit requirement.**

B. Consistency with Land Use Code Critical Areas Performance Standards:

i. Steep Slope Performance Standards – 20.25H.0125

LUC 20.25H.120.A.2 defines steep slope aeras as "those areas that contain slopes of greater than 40%, have a rise of at least 10 feet, and exceed 1,000 square feet in area." Regulated steep slopes are protected by a 50-foot top-of-slope buffer and a 75-foot toe-of-slope structure setbacks. (LUC 20.25H.120.B.1). Development on sites with steep slopes or steep slope critical area buffers shall incorporate the following performance standards, as applicable:

1. **Structures and improvements shall minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to confirm to existing topography;**

   Finding: No topographic modifications are proposed in the steep slope or top-of-slope buffer. The proposed two-level deck will be located in the same area as the

previous deck.

2. **Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;**
   Finding: The proposed deck replacement is located within an area already impacted by the existing single-family residence and deck. No other permanent development impacts are proposed within the steep slope buffer. The proposal includes revegetation to the steep slope buffer through installation of native plants and lawn. Trees and large shrubs will be installed on the boundary of the critical area to establish root mass on the top of the steep slopes. A variety of native plants will be planted uphill from the slope and the remaining area around the deck and residence will be planted with lawn.

3. **The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties;**
   Finding: The applicant submitted a limited geotechnical reconnaissance report, prepared by Associated Earth Sciences, Inc., dated October 9, 2020 and revised May 21, 2021. The geotechnical report evaluated the site for landslide hazards and indications of potential slope instability with regard to the proposed deck reconstruction. The report concluded that the zone of influence from the deck pad foundation loads would not add a surcharge to the slope and impact current stability.

4. **The use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes where graded slopes would result in increased disturbance as compared to use of retaining wall;**
   Finding: One existing railroad tie retaining wall exists within the steep slope buffer. There is no proposal to replace or modify this existing wall. No other retaining walls are currently proposed. Reconstruction of the deck will not involve grading or disturbance of the steep slope or the steep slope buffer.

5. **Development shall be designed to minimize impervious surfaces within the critical area and critical area buffer;**
   Finding: No new impervious surfaces are proposed within the steep slope or steep slope buffer. The proposal includes reconstruction of the existing two-level deck in approximately the same size and location. There is no concrete pad below the deck and no cover proposed above the deck.

6. **Where change in grade outside the building footprint is necessary, the site retention system should be stepped and regrading should be designed to minimize topographic modification. On slopes in excess of 40 percent, grading for yard area may be disallowed where inconsistent with this criteria;**
   Finding: The deck will be reconstructed in a similar location as the previous deck, which is on an existing flat area. Concrete footings will be used in the construction and no change or excavation is proposed.

7. **Building foundation walls shall be utilized as retaining walls rather than rockeries or retaining structures built separately and away from the building wherever feasible. Freestanding retaining devices are only permitted when they cannot be designed as structural elements of the building foundation;**
   Finding: No retaining structures (walls, rockeries, etc.) are proposed. An existing railroad tie retaining wall that is two railroad ties in height and approximately 35 feet in length will remain.

8. **On slopes in excess of 40 percent, use of pole-type construction which conforms to the existing topography is required where feasible. If pole-type construction is not technically feasible, the structure must be tiered to conform to the existing topography and to minimize topographic modification;**
   Finding: The replacement deck will use pole-type construction which conforms to the existing topography. New concrete footings will be installed in the same area as the existing deck.

9. **On slopes in excess of 40 percent, piled deck support structures are required where technically feasible for parking or garages over fill-based construction types; and**
   Finding: Not applicable. No parking or garages over slopes in excess of 40% are proposed.

10. **Areas of new permanent disturbance and all areas of temporary disturbance shall be mitigated and/or restored pursuant to a mitigation and restoration plan meeting the requirements of LUC 20.25H.210.**
    Finding: The proposal includes approximately 2,500 square feet of native vegetation and 1,000 square feet of lawn to be planted as restoration for the vegetation that was removed from the steep slope buffer.

C. Consistency with Critical Areas Report LUC 20.25.230.

The applicant supplied a complete critical areas report prepared by Associated Earth Sciences, Inc. (Attachment 4: Geotechnical Report), and Raedeke Associates, Inc. (Attachment 2: Vegetation Restoration Plan), both qualified professionals. The reports met the minimum requirements in LUC 20.25H.250.

IV. Public Notice and Comment

Application Date:	March 30, 2021
Public Notice (500 feet):	April 15, 2021
Minimum Comment Period:	April 29, 2021

The Notice of Application for this project was published in the Seattle Times and the City of Bellevue Weekly Permit Bulletin on April 15, 2021. It was mailed to property owners within 500 feet of the project site. No comments have been received from the public as of the

writing of this staff report.

V. Summary of Technical Reviews

Clearing and Grading:
The Clearing and Grading Division of the Development Services Department has reviewed the proposed development for compliance with Clearing and Grading codes and standards. The Clearing and Grading staff found no issues with the proposed development. **See Section IX for Conditions of Approval related to rainy season restrictions.**

Utilities:
City of Bellevue Utilities staff has reviewed the proposed development for compliance with City of Bellevue Utilities codes and standards. Utilities staff found no issues with the proposed development.

VI. Changes to Proposal as a Result of City Review

No significant changes were requested by City staff during the review of this proposal.

VII. Decision Criteria

A. Critical Areas Land Use Permit Decision Criteria 20.30P

The Director may approve or approve with modifications an application for a critical areas land use permit if:

1. The proposal obtains all other permits required by the Land Use Code;

Finding: The applicant will be required to finalize the review for Building Permit 20-110087 BR (submitted on June 11, 2020) after the approval of the Critical Areas Land Use Permit. **See Section IX for Conditions of Approval related to construction permit requirements.**

2. The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer;

Finding: The proposal has been designed and located to utilize areas of the site in which an existing deck previously occupied. The proposed deck replacement is located within an area of existing development and within a buffer area of low function due to existing degraded conditions caused by prior single-family development. The design includes restoration planting of native species.

3. The proposal incorporates the performance standards of Part 20.25H to the maximum extent applicable, and;

Finding: As discussed in Section III.B of this report, the proposal incorporates the

performance standards of LUC Part 20.25H for work within a steep slope buffer to the maximum extent applicable.

4. The proposal will be served by adequate public facilities including street, fire protection, and utilities; and;

Finding: The site is currently served by adequate public facilities and no additional need is anticipated with this proposal. No change in public facilities service is anticipated.

5. The proposal includes a mitigation or restoration plan consistent with the requirements of LUC Section 20.25H.210; and

Finding: The proposal includes a vegetation restoration plan for the vegetation that was removed from the steep slope buffer that provides native planting consistent with LUC 20.25H.210. The applicant will be required to implement the restoration plan prepared by Raedeke Associates, Inc. dated March 9, 2021. Pursuant to LUC 20.25H.220.D, a maintenance and monitoring assurance device is required for five (5) years. **See Section IX for Conditions of Approval related to maintenance and monitoring.**

6. The proposal complies with other applicable requirements of this code.

Finding: As discussed in Section III and V of this report, the proposal complies with all other applicable requirements of the Land Use Code.

VIII. Conclusion and Decision

After conducting the various administrative reviews associated with this proposal, including Land Use Code consistency, City Code and Standard compliance reviews, the Director of the Development Services Department does hereby **approve with conditions** the proposal to reconstruct a two-level deck and steep slope buffer restoration at 13607 SE 55th Pl as shown on the proposed plans (Attachment 1).

Note- Expiration of Approval: In accordance with LUC 20.30P.150 a Critical Areas Land Use Permit automatically expires and is void if the applicant fails to file for a Building Permit or other necessary development permits within one year of the effective date of the approval.

IX. Conditions of Approval

The applicant shall comply with all applicable Bellevue City Codes and Ordinances including but not limited to:

Applicable Ordinances	Contact Person
Clearing and Grading Code - BCC 23.76	Savina Uzunow, 425-452-7860

Utilities Code - BCC 24	Jeremy Rosenlund, 425-452-4855
Land Use Code - BCC 20	Kennith George, 425-452-5264
Noise Code – BCC 9.18	Kennith George. 425-452-4282

The following conditions are imposed under the Bellevue City Code authority referenced:

1. Building Permit Required: Approval of this Critical Areas Land Use Permit does not constitute an approval of a development permit. A Building Permit (with Clearing & Grading review) shall be required and approved. Plans consistent with those submitted as part of this permit application shall be included in the Building Permit application (20-110087 BR).

Authority: Land Use Code 20.30P.140
Reviewer: Kennith George, Land Use

2. Final Restoration Plan: A final vegetation restoration plan in accordance with the restoration plan (Attachment 2) provided under this application shall be submitted for final review and approval with the Building Permit application (20-110087 BR).

Authority: Land Use Code 20.25H.125
Reviewer: Kennith George, Land Use

3. Maintenance and Monitoring Plan: A maintenance and monitoring plan with goals and objectives shall be submitted for review and approval by the City of Bellevue prior to issuance of the Building Permit (20-110887 BR). The restoration plan shall be maintained and monitored for a minimum of five (5) years.

Authority: Land Use Code 20.25H.220.D
Reviewer: Kennith George, Land Use

4. Planting Cost Estimate: A planting cost estimate detailing the cost for materials and labor identified on the restoration plan shall be submitted as with the Building Permit application (20-110087 BR). The estimate shall also include the cost of five (5) years of maintenance and monitoring activities.

Authority: Land Use Code 20.30P.140
Reviewer: Kennith George, Land Use

5. Maintenance and Monitoring Assurance Device: A financial surety is required to be submitted to ensure the mitigation planting successfully establishes. A maintenance assurance device that is equal to 100% of the cost of plants and installation, or 20% of the cost of a professional 5-year monitoring contract is required to be held for a period of five (5) years from the date of building permit issuance. A cost estimate is required to be provided with the building permit. The financial surety is required to be posted prior to Building Permit issuance. Release of the surety after the 5-year monitoring period is

contingent upon a final inspection of the planting by Land Use Staff that finds the maintenance and monitoring plan was successful and the mitigation meets performance standards.

Authority: Land Use Code 20.25H.220.F
Reviewer: Kennith George, Land Use

6. Clearing and Grading Permit Required: Approval of this Critical Areas Land Use Permit does not constitute an approval of any construction permit. Clearing and grading review must be granted to the building permit before construction can begin. Plans submitted as part of any permit application shall be consistent with the activity permitted under this approval.

Authority: Land Use Code 20.30P.140; Clearing & Grading Code 23.76.035
Reviewer: Savina Uzunow, Clearing & Grading

7. Geotechnical Review: The project geotechnical engineer must review the final construction plans, including all foundation and wall designs. A letter from the geotechnical engineer stating that the plans conform to the recommendations in the geotechnical report and any addendums and supplements must be submitted to the clearing and grading section prior to issuance of the construction permit.

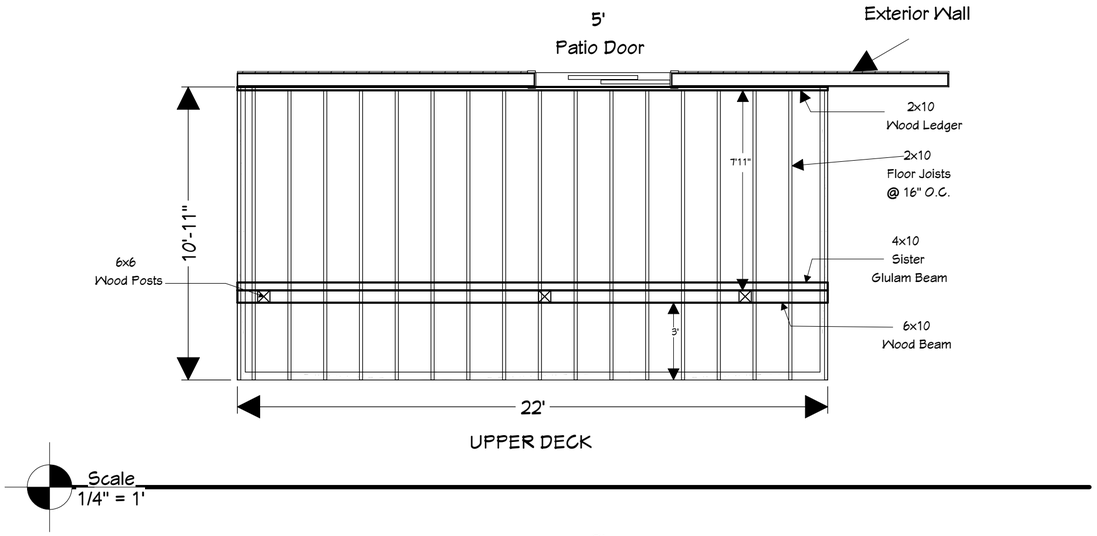
Authority: Clearing & Grading Code 23.76.050
Reviewer: Savina Uzunow, Clearing & Grading

8. Geotechnical Inspection: The project geotechnical engineer must provide geotechnical inspection during project construction, including subgrades for foundations and footings, walls and any unusual seepage, slope, or subgrade conditions.

Authority: Clearing & Grading Code 23.76.050
Reviewer: Savina Uzunow, Clearing & Grading

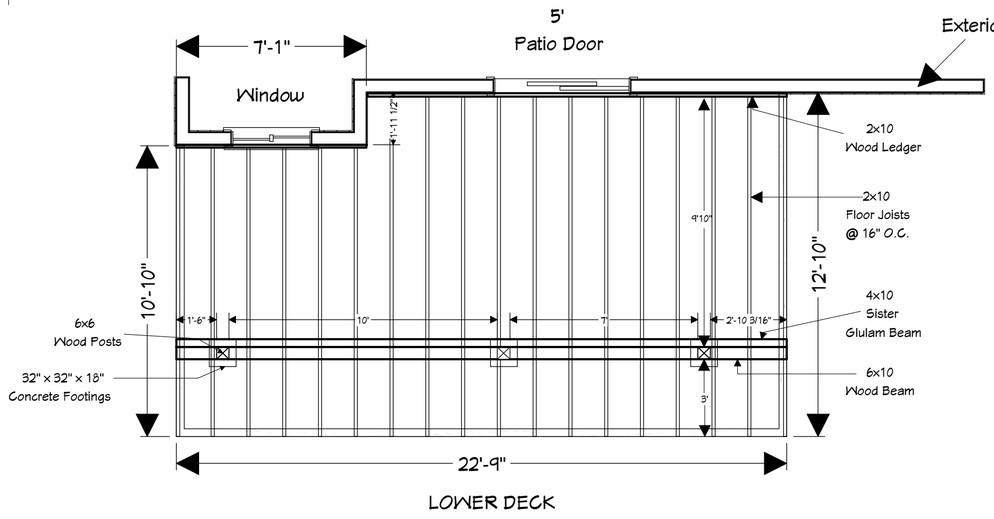
9. Rainy Season restrictions: Due to the critical areas on the site, no clearing and grading activity may occur during the rainy season, which is defined as October 1 through April 30 without written authorization of the Development Services Department. Should approval be granted for work during the rainy season, increased erosion and sedimentation measures, representing the best available technology must be implemented prior to beginning or resuming site work.

Authority: Bellevue City Code 23.76.093.A
Reviewer: Savina Uzunow, Clearing & Grading



UPPER DECK

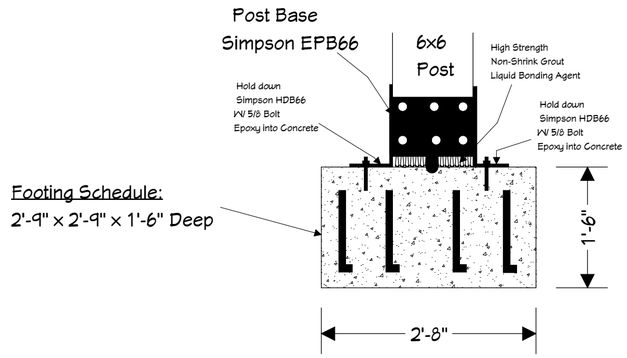
Scale
1/4" = 1'



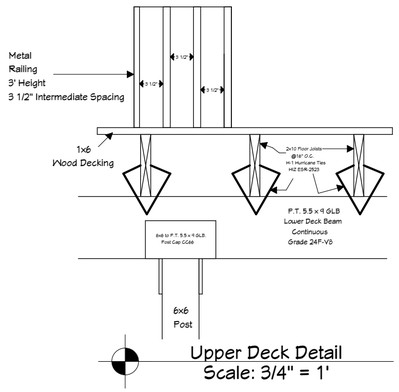
LOWER DECK

Notes:

See Brian J. Loshbough, P.E.
Structual Caculations Attached

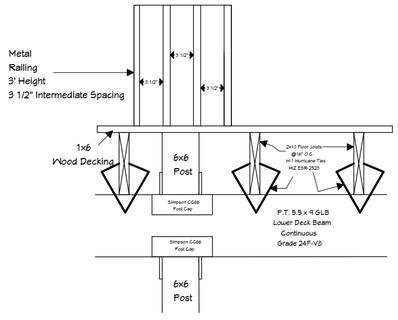


Footing Schedule:
2'-9" x 2'-9" x 1'-6" Deep

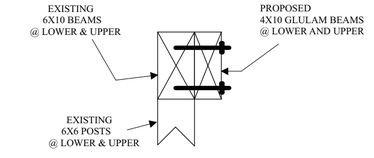


Footings Detail (x3)
Scale 3/4" = 1'

Upper Deck Detail
Scale: 3/4" = 1'



Lower Deck Detail
Scale: 3/4" = 1'



LOWER & UPPER BEAM REINFORCEMENT
Scale: 3/4" = 1'

Lower & Upper Decks Plan

Drafting Design
Cosme Hernandez
Chief Design Officer
PO Box 156
Malaga, WA 98828
(559) 551-9478

NO.	DESCRIPTION	BY	DATE

SHEET TITLE: Lower & Upper Decks Plan

Property Address: 13607 SE 55th PL Bellevue, WA

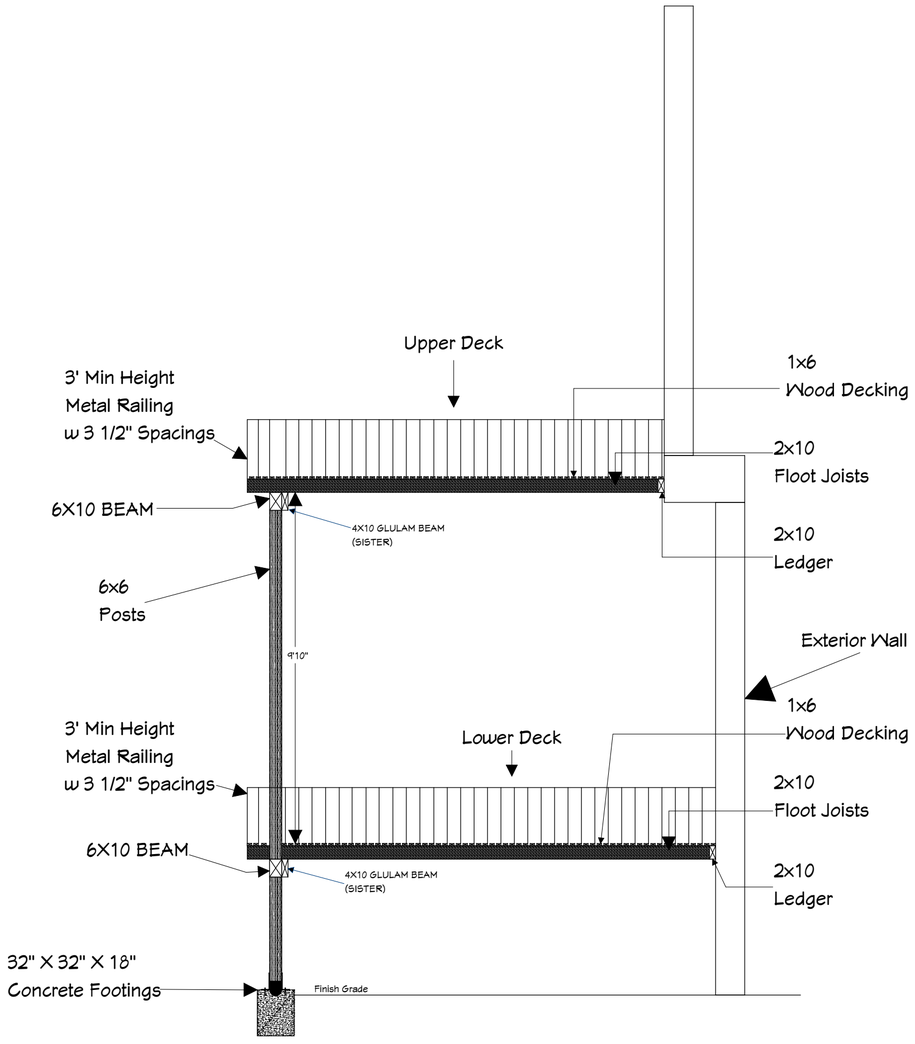
Parcel Number: 9323600460

Property Owner/Contractor: Luiz Brothers Construction, LLC

DATE: REVISED 05/19/2021

SCALE: -------

SHEET: A-1



Notes:

See Brian J. Loshbough, P.E.
Structual Caculations Attached

Elevation View Plan

Cosme Hernandez
Chief Design Officer
PO Box 156
Malaga, WA 98828
(559) 551-9478

NO.	DESCRIPTION	BY	DATE

SHEET TITLE: Elevation View Plan

Property Address: 13607 SE 55th PL Bellevue, WA

Parcel Number: 9323600460

Property Owner/Contractor: Luiz Brothers Construction, LLC

DATE: REVISED 05/19/2020

SCALE: -------

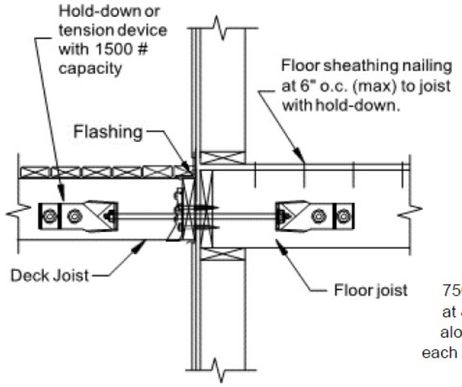
SHEET: A-2

Required @ 6' O.C.

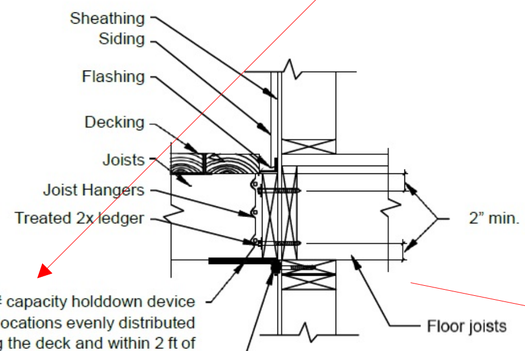
Required @ 3' O.C.

Detail 1 – Ledger Attachment for Lateral Loads

(Knee braces are required on posts greater than 4 feet in height.)



Option # 1
(Required for New Construction)



Option # 2
(Existing Construction Only)

6x6 Knee Bracing is to be added
on each Post-to-Beam Connection

Additional Details Plan

Cosme Hernandez
Chief Design Officer
PO Box 156
Malaga, WA 98828
(559) 551-9478

NO.	DESCRIPTION	BY	DATE

SHEET TITLE: Additional Details Plan

Property Address: 13607 SE 55th PL Bellevue, WA

Parcel Number: 9323600460

Property Owner/Contractor: Luiz Brothers Construction, LLC

DATE:
REVISED
05/19/2021

SCALE:

SHEET:
A-3

TOPOGRAPHIC & BOUNDARY SURVEY

LEGAL DESCRIPTION

(PER STATUTORY WARRANTY DEED RECORDING# 20191217001449)

LOT 46, WESTWOOD HIGHLANDS, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 106 OF PLATS, PAGE(S) 97 AND 98, IN KING COUNTY, WASHINGTON.

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

BASIS OF BEARINGS

HELD N 88°30'00" W BETWEEN MONUMENTS FOUND ON THE CENTERLINE OF SE 55TH PL PER R1.

REFERENCES

R1. PLAT OF WESTWOOD HIGHLANDS, VOL. 106, PG. 97, RECORDS OF KING COUNTY, WASHINGTON.

VERTICAL DATUM

NAVD88 PER GPS OBSERVATIONS.

SURVEYOR'S NOTES

1. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN FEBRUARY OF 2021. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS.
2. ALL MONUMENTS SHOWN HEREON WERE LOCATED DURING THE COURSE OF THIS SURVEY UNLESS OTHERWISE NOTED.
3. THE TYPES AND LOCATIONS OF ANY UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED TO US, BY OTHERS OR GENERAL INFORMATION READILY AVAILABLE IN THE PUBLIC DOMAIN INCLUDING, AS APPLICABLE, IDENTIFYING MARKINGS PLACED BY UTILITY LOCATE SERVICES AND OBSERVED BY TERRANE IN THE FIELD. AS SUCH, THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS ARE FOR INFORMATIONAL PURPOSES ONLY AND SHOULD NOT BE RELIED ON FOR DESIGN OR CONSTRUCTION PURPOSES; TERRANE IS NOT RESPONSIBLE OR LIABLE FOR THE ACCURACY OR COMPLETENESS OF THIS UTILITY INFORMATION. FOR THE ACCURATE LOCATION AND TYPE OF UTILITIES NECESSARY FOR DESIGN AND CONSTRUCTION, PLEASE CONTACT THE SITE OWNER AND THE LOCAL UTILITY LOCATE SERVICE (800-424-5555).
4. SUBJECT PROPERTY TAX PARCEL NO. 9323600460.
5. SUBJECT PROPERTY AREA PER THIS SURVEY IS 11,934± S.F. (0.27 ACRES)
6. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST THAT ARE NOT SHOWN HEREON.
7. FIELD DATA FOR THIS SURVEY WAS OBTAINED BY DIRECT FIELD MEASUREMENTS WITH A CALIBRATED ELECTRONIC 5-SECOND TOTAL STATION AND/OR SURVEY GRADE GPS OBSERVATIONS. ALL ANGULAR AND LINEAR RELATIONSHIPS ARE ACCURATE AND MEET THE STANDARDS SET BY WAC 332-130-090.

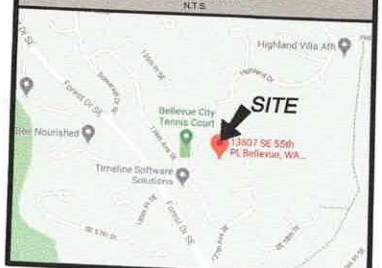
LEGEND

ASPHALT SURFACE, BUILDING, CENTERLINE ROW, CONCRETE SURFACE, RETAINING WALL, DECK, FENCE LINE (IRON), FENCE LINE (WOOD), FLAGSTONE SURFACE, GAS LINE, GAS METER, HEDGE FOLIAGE LINE, PAVER SURFACE, MONUMENT IN CASE (FOUND), MONUMENT (SURFACE, FOUND), STEEP SLOPE AREA

AREA DRAIN, POWER METER, REBAR AS NOTED (FOUND), REBAR & CAP (SET), ROCKERY, SEWER LINE, SEWER MANHOLE, STORM DRAIN LINE, TEL. SENTRY, TELEPHONE SENTRY, TREE (AS NOTED), WATER LINE, WATER METER, HEAT EXCHANGER, INLET (TYPE 1), IRON PIPE (FOUND)

VICINITY MAP

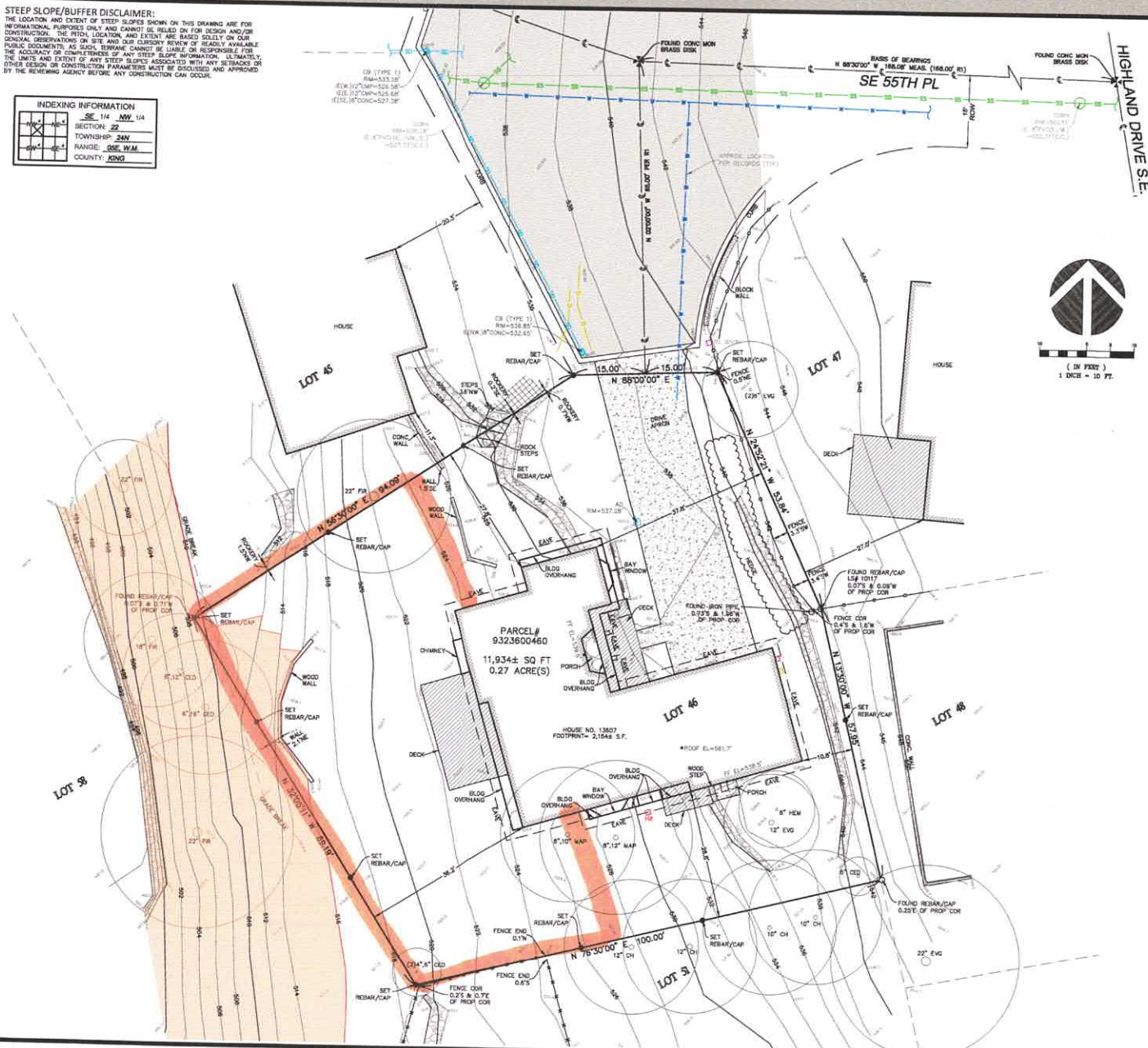
N.T.S.



STEEP SLOPE/BUFFER DISCLAIMER:

THE LOCATION AND EXTENT OF STEEP SLOPES SHOWN ON THIS DRAWING ARE FOR INFORMATIONAL PURPOSES ONLY AND CANNOT BE RELIED ON FOR DESIGN AND/OR CONSTRUCTION. THE PITCH, LOCATION, AND EXTENT ARE BASED SOLELY ON OUR GENERAL OBSERVATIONS ON SITE AND OUR CURSORY REVIEW OF READILY AVAILABLE PUBLIC DOCUMENTS; AS SUCH, TERRANE CANNOT BE LIABLE OR RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY STEEP SLOPE INFORMATION. ULTIMATELY, OTHER DESIGN OR CONSTRUCTION PARAMETERS MUST BE DISCUSSED AND APPROVED BY THE REVIEWING AGENCY BEFORE ANY CONSTRUCTION CAN OCCUR.

INDEXING INFORMATION
SE 1/4 NW 1/4
SECTION: 22
TOWNSHIP: 24N
RANGE: 05E, W.M.
COUNTY: KING



TOPOGRAPHIC & BOUNDARY SURVEY
PARCEL NO. 9323600460

CHAFFEE RESIDENCE
13607 SE 55TH PL
BELLEVUE, WA 98006

measure success

Terrane
10801 Main Street, Suite 102, Bellevue, WA 98004
phone 425.458.4488 support@terrane.net
www.terrane.net

JOB NUMBER:	200792
DATE:	02/23/2021
DRAFTED BY:	RSN
CHECKED BY:	JPS
SCALE:	1" = 10'

REVISION HISTORY

SHEET NUMBER
1 OF 1

Please Add ▬ 6 foot wood fence

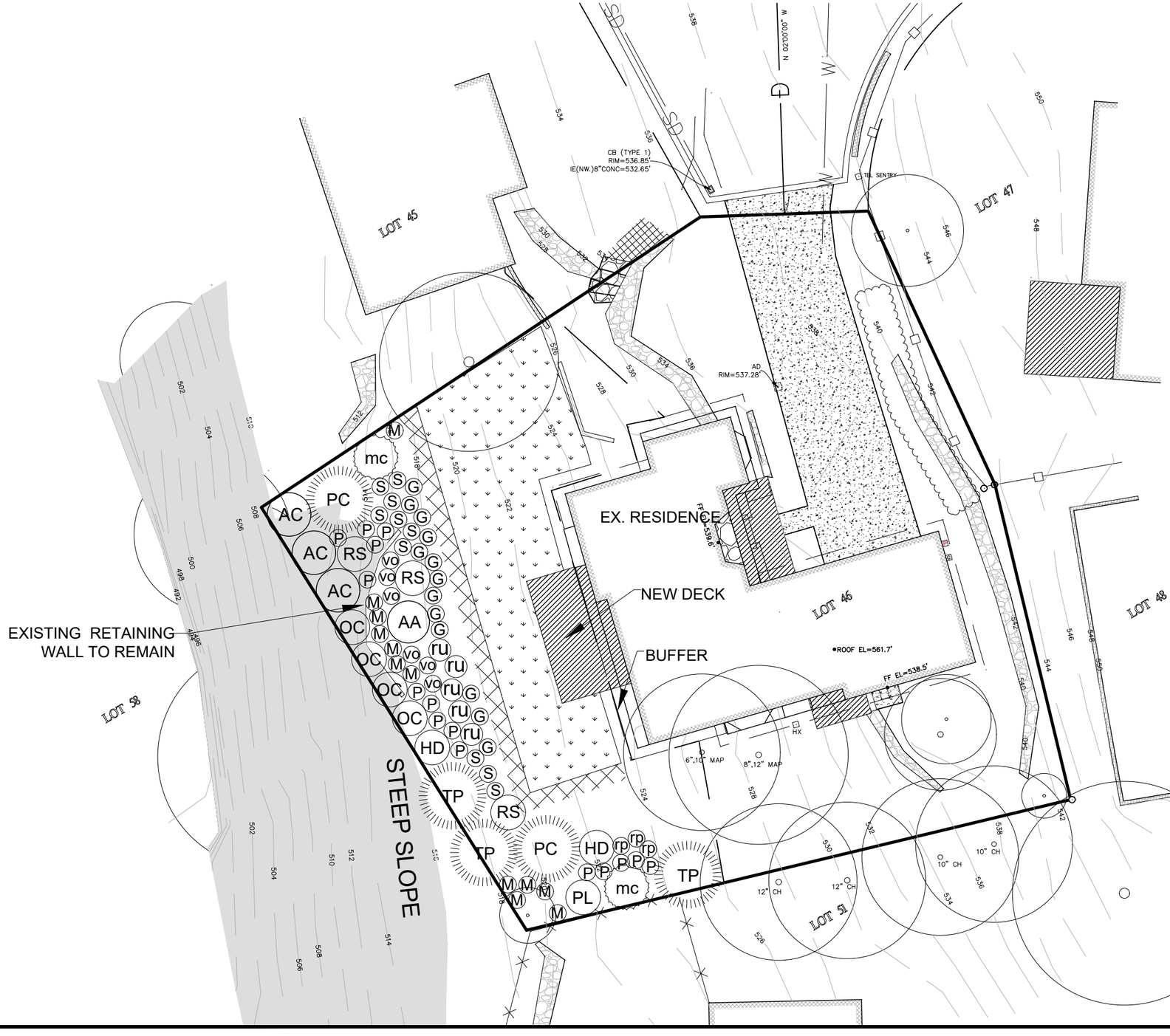
FIGURE 1

CHAFEE BELLEVUE

BELLEVUE, WA

STEEP SLOPE BUFFER

RESTORATION PLAN



LEGEND

- PROPERTY LINE
- STEEP SLOPE
- STEEP SLOPE BUFFER (50 FT.)

Raedeke Associates, Inc.
2111 N. Northgate Way, Ste 219
Seattle, WA 98133

NORTH

0 10' 20' 40'

SCALE: 1" = 20'

RAI PROJECT: 2020-106	
DATE: 3/9/2021	
DRAWN BY:AC	PM:CW
BASE INFORMATION:	

C:\Users\jagan\Desktop\Raedeke\2020-106 Chaffee Bellevue\2020-106 Chaffee Bellevue.dwg

FIGURE 2

CHAFEE BELLEVUE

BELLEVUE, WA

STEEP SLOPE BUFFER

PLANT SCHEDULE

TREES

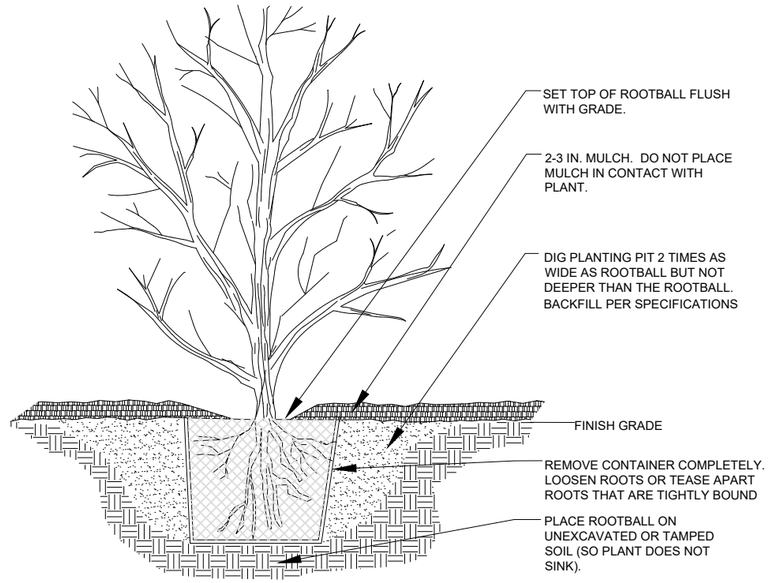
SYMBOL	SCIENTIFIC NAME	COMMON NAME	WIS STATUS	MIN. SIZE	QTY.
PC	*Pinus contorta var. contorta*	Beach Pine	UPL	4' tall	2
TP	*Thuja plicata*	Western red Arborvitae	FAC	4' tall	3

SHRUBS

SYMBOL	SCIENTIFIC NAME	COMMON NAME	WIS STATUS	MIN. SIZE (container)	QTY.
AC	*Acer circinatum*	Vine Maple	FAC	5 gal.	3
AA	*Amelanchier alnifolia*	Saskatoon Service-berry	FAC	5 gal.	1
G	*Gaultheria shallon*	Salal	FACU	1 gal.	13
HD	*Holodiscus discolor*	Creambush	FACU	1 gal.	2
M	*Mahonia aquifolium*	Hollyleaved Oregon grape	FACU	1 gal.	12
mc	*Myrica californica*	Pacific Wax myrtle	UPL	2 gal	2
OC	*Oemleria cerasiformis*	Osoberry	FACU	1 gal.	4
PL	Philadelphus lewisii	Mock Orange	UPL	2 gal.	1
P	*Polystichum munitum*	Pineland Swordfern	FACU	1 gal.	15
RS	*Ribes sanguineum*	Redflower Currant	FACU	1 gal.	3
rp	*Rosa pisocarpa*	Clustered Rose	FAC	1 gal.	3
ru	*Rubus parviflorus*	Western Thimbleberry	FACU	1 gal.	5
S	*Symphoricarpos albus*	Common Snowberry	FACU	1 gal.	10
vo	*Vaccinium ovatum*	Evergreen Blueberry	FACU	1 gal.	6

GROUNDCOVER

SYMBOL	SCIENTIFIC NAME	COMMON NAME	SPACING	MIN. SIZE (container)	QTY.
	Frageria chiloensis	Beach strawberry	12 in. oc	4 in.	300
		Lawn			



1 **CONTAINER TREE OR SHRUB PLANTING DETAIL**
NTS

RAI PROJECT: 2020-106	
DATE: 3/9/2021	
DRAWN BY:AC	PM:CW
BASE INFORMATION:	

C:\Users\jagar\Desktop\Raedeke\2020-106 Chaffee Bellevue\2020-106 Chaffee Bellevue.dwg

The Vegetation Management Plan shall include:

(1) A description of existing site conditions, including existing critical area functions and values;

The site is a residential lot located in a neighborhood in Bellevue, WA and has one residence located on the lot. The southwest portion of the lot is a steep slope buffer. The steep slope is a vegetated hillside southwest of the residence. The home is located outside the steep slope buffer. The buffer for the steep slope functions to buffer the steep slope and prevent loading on the steep slope which could cause slumping, landslides, or similar.

(2) A site history;
The buffer was cleared of the existing vegetation. An existing retaining wall is to remain within the buffer. The buffer is the residence's backyard and only open space on the lot. A second-story wooden deck was also constructed on the house. This deck is located at the far edge of the steep slope buffer. In addition, three trees were topped on the steep slope.

(3) A discussion of the plan objectives;
The objective of the plan is to revegetate the steep slope buffer with a native plants and lawn. The roots of the native plants will help stabilize the steep slope. Trees and large shrubs will be installed on the boundary of the critical area to establish root mass on the top of the steep slope. A variety of native plants have been chosen to support a variety of birds and insects. The proposed lawn area is within the outer portion of the buffer. The lawn will provide the homeowners a place to recreate and usable outdoor space on their property. The lawn will drain towards the native plants within the buffer. The native plant area will absorb the runoff from the lawn prior to reaching the steep slope critical area. Pesticides, herbicides, and fungicides cannot be used on the lawn.

(4) A description of all sensitive features;
A steep slope is located off-site and the 50-foot buffer for the steep slope is located on the property.

(5) Identification of soils, existing vegetation, and habitat associated with species of local importance present on the site;
See the geo-engineers report for a discussion of soils on-site. No species of local importance are located on-site.

(6) Allowed work windows;
This site is going to be planted and mulched. No grading will be occurring within the steep slope buffer or on the steep slope. The revegetated buffer will need to be irrigated for a minimum of two years, therefore planting can occur any time of the year.

(7) A clear delineation of the area within which clearing and other vegetation management practices are allowed under the plan;
See Figure 1, the Restoration plan. No further clearing will be occurring on-site. Unless invasive vegetation, such as blackberry or English ivy has colonized the cleared areas. All invasive vegetation will be removed prior to the installation of the restoration area.

(8) Short- and long-term management prescriptions, including restoration and revegetation requirements.

The lawn area must be maintained without the use of pesticides, herbicides, or fungicides. The inclusion of a lawn will secure the long-term restoration of the lower portion of the buffer with native plants. The buffer can be weeded of non-native plants or other plants thought of as weeds. Herbicides and line trimmers should not be used in the area planted with native plants. Line trimmers often harm woody plants. The plants can be mulched with a woody mulch as necessary. Plants should be allowed to sucker and grow. Trees and shrubs are not to be pruned unless given permission by the City of Bellevue. Yard waste or garbage will not be disposed of the in the steep slope buffer or the steep slope.

FIGURE 3

CHAFEE BELLEVUE

BELLEVUE, WA

STEEP SLOPE BUFFER

VEGETATION MANANGEMENT PLAN

RAI PROJECT: 2020-106	
DATE: 3/9/2021	
DRAWN BY:AC	PM:CW
BASE INFORMATION:	

C:\Users\jagan\Desktop\Raedeke\2020-106 Chaffee Bellevue\2020-106 Chaffee Bellevue.dwg

TOPOGRAPHIC & BOUNDARY SURVEY

LEGAL DESCRIPTION

(PER STATUTORY WARRANTY DEED RECORDING# 20191217001449)

LOT 46, WESTWOOD HIGHLANDS, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 106 OF PLATS, PAGE(S) 97 AND 98, IN KING COUNTY, WASHINGTON.

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

BASIS OF BEARINGS

HELD N 88°30'00" W BETWEEN MONUMENTS FOUND ON THE CENTERLINE OF SE 55TH PL PER R1.

REFERENCES

R1. PLAT OF WESTWOOD HIGHLANDS, VOL. 106, PG. 97, RECORDS OF KING COUNTY, WASHINGTON.

VERTICAL DATUM

NAVD88 PER GPS OBSERVATIONS.

SURVEYOR'S NOTES

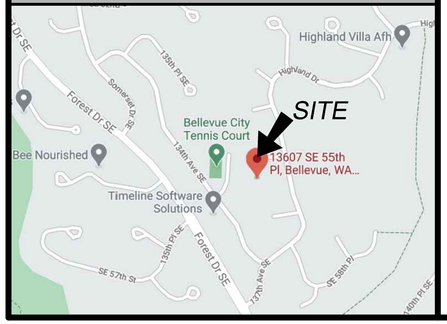
1. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN FEBRUARY OF 2021. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS.
2. ALL MONUMENTS SHOWN HEREON WERE LOCATED DURING THE COURSE OF THIS SURVEY UNLESS OTHERWISE NOTED.
3. THE TYPES AND LOCATIONS OF ANY UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED TO US, BY OTHERS OR GENERAL INFORMATION READILY AVAILABLE IN THE PUBLIC DOMAIN INCLUDING, AS APPLICABLE, IDENTIFYING MARKINGS PLACED BY UTILITY LOCATE SERVICES AND OBSERVED BY TERRANE IN THE FIELD. AS SUCH, THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS ARE FOR INFORMATIONAL PURPOSES ONLY AND SHOULD NOT BE RELIED ON FOR DESIGN OR CONSTRUCTION PURPOSES; TERRANE IS NOT RESPONSIBLE OR LIABLE FOR THE ACCURACY OR COMPLETENESS OF THIS UTILITY INFORMATION. FOR THE ACCURATE LOCATION AND TYPE OF UTILITIES NECESSARY FOR DESIGN AND CONSTRUCTION, PLEASE CONTACT THE SITE OWNER AND THE LOCAL UTILITY LOCATE SERVICE (800-424-5555).
4. SUBJECT PROPERTY TAX PARCEL NO. 9323600460.
5. SUBJECT PROPERTY AREA PER THIS SURVEY IS 11,934± S.F. (0.27 ACRES)
6. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST THAT ARE NOT SHOWN HEREON.
7. FIELD DATA FOR THIS SURVEY WAS OBTAINED BY DIRECT FIELD MEASUREMENTS WITH A CALIBRATED ELECTRONIC 5-SECOND TOTAL STATION AND/OR SURVEY GRADE GPS OBSERVATIONS. ALL ANGULAR AND LINEAR RELATIONSHIPS ARE ACCURATE AND MEET THE STANDARDS SET BY WAC 332-130-090.

LEGEND

	ASPHALT SURFACE		AREA DRAIN
	BUILDING	P	POWER METER
℄	CENTERLINE ROW		REBAR AS NOTED (FOUND)
	CONCRETE SURFACE		REBAR & CAP (SET)
	RETAINING WALL		ROCKERY
	DECK	SS	SEWER LINE
	FENCE LINE (IRON)		SEWER MANHOLE
	FENCE LINE (WOOD)	SD	STORM DRAIN LINE
	FLAGSTONE SURFACE	TEL SENTRY	TELEPHONE SENTRY
G	GAS LINE	SIZE TYPE	TREE (AS NOTED)
G	GAS METER	W	WATER LINE
	HEDGE FOLIAGE LINE	WM	WATER METER
	PAVER SURFACE	HX	HEAT EXCHANGER
	MONUMENT IN CASE (FOUND)		INLET (TYPE 1)
	MONUMENT (SURFACE, FOUND)	IP	IRON PIPE (FOUND)
	STEEP SLOPE AREA		

VICINITY MAP

N.T.S.



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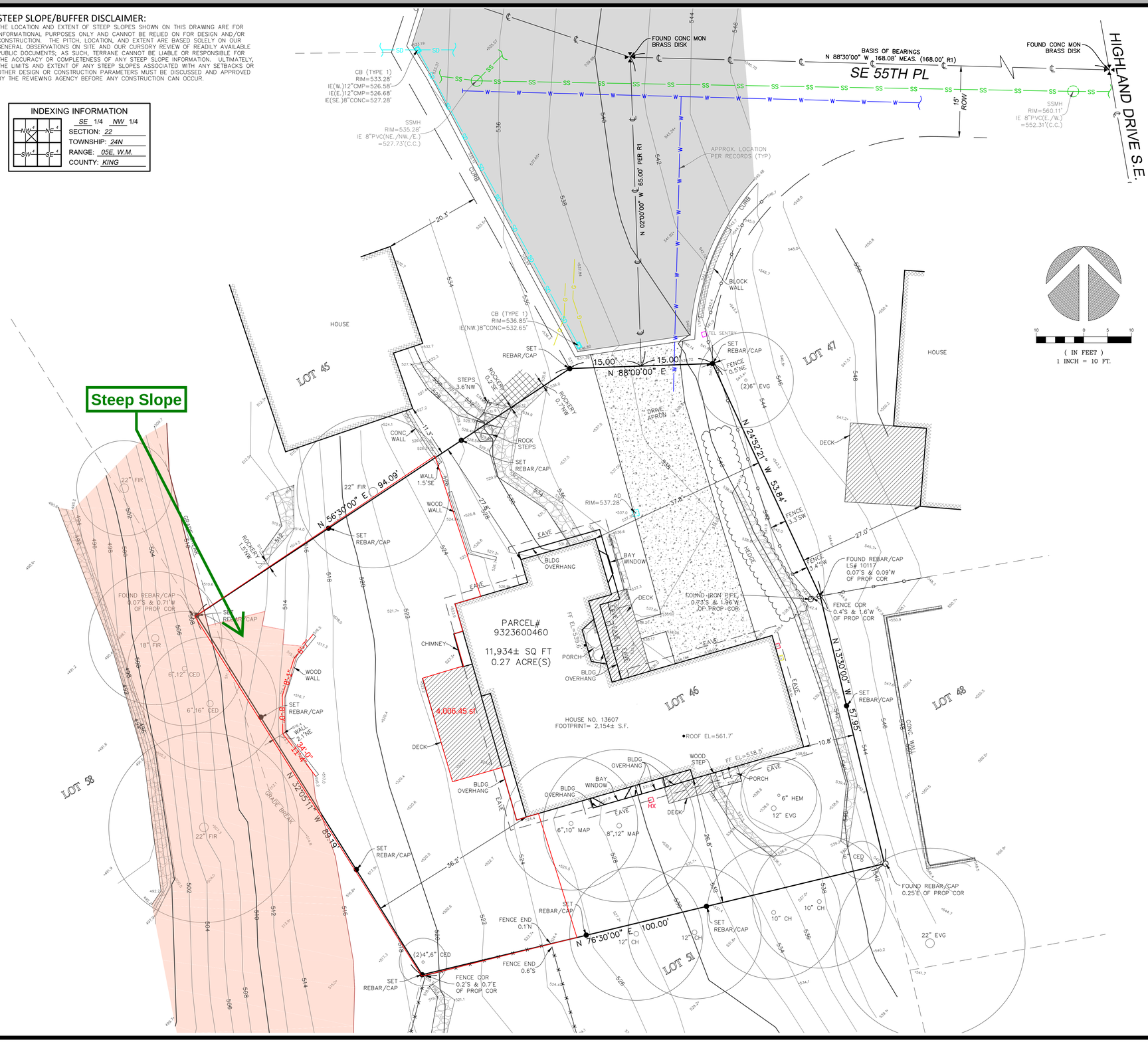
INDEXING INFORMATION

SE 1/4 NW 1/4
SECTION: 22
TOWNSHIP: 24N
RANGE: 05E, W.M.
COUNTY: KING



measure success

TOPOGRAPHIC & BOUNDARY SURVEY
PARCEL NO. 9323600460

CHAFFEE RESIDENCE

13607 SE 55TH PL
BELLEVUE, WA 98006

Terrane
10801 Main Street, Suite 102, Bellevue, WA 98004
phone 425.458.4488 support@terrane.net
www.terrane.net

JOB NUMBER:	200792
DATE:	02/23/2021
DRAFTED BY:	RSN
CHECKED BY:	JPS
SCALE:	1" = 10'

REVISION HISTORY

SHEET NUMBER

1 OF 1

October 9, 2020
Revised May 21, 2021
Project No. 20200315E001

Mike Chaffee
6535 111th Avenue NE
Kirkland, Washington 98033

Subject: Geotechnical Reconnaissance
Chaffee Property - Deck Replacement in Critical Area Buffer
13607 SE 55th Place
Bellevue, Washington

Dear Mr. Chaffee:

At your request, Associated Earth Sciences, Inc. (AESI) performed a geotechnical reconnaissance of the site and reviewed available geotechnical and geologic information in the vicinity of the site. No subsurface explorations or testing of soil was performed. We have prepared this letter-report to address comments from the City of Bellevue (City) you received via email on July 22, 2020. Our report was prepared to address Section 20.25H.145 of the City's Land Use Code.

SITE AND PROJECT DESCRIPTION

The site is located at 13607 SE 55th Place in the Somerset area of Bellevue, Washington as shown on the "Vicinity Map," Figure 1. The portion of your property where improvements are planned descends to the west gradually to a steep slope classified as a critical area as shown on the "Site Plan," Figure 2. This steep slope is located entirely on your neighbor's property based on a recent property boundary survey. We understand that you are in the process of remodeling the existing residence that was built in 1979. As part of the remodel, the two-level deck on the west side of the house is being replaced. In addition, we understand that existing vegetation was removed from the area between the deck and the steep slope which had become overgrown. We understand that the area between the house and the top of the steep slope is considered by the City to be a steep slope critical area buffer. We understand that the City is requiring a geotechnical report be prepared to support the deck replacement work which extends into the buffer and, more specifically, impacts the stability of the steep slope. We understand other site improvements will include construction of a 6-foot-tall wooden fence along the property boundary on the west side of the site.

SITE CONDITIONS

AESI visited the site on September 22, 2020, to observe current conditions. Site photos are presented in the Appendix. We observed that a new wooden, two-level deck was in the process of being constructed onto the west side of the house. The deck is supported by three, nominal 6-inch-by-6-inch wood posts bearing on 3-foot square concrete pad footings. Temporary wood framing was observed beneath the deck. We used a tape measure to determine that the deck footings are located from 33 to 36 feet from the top of steep slope and the house is located about 50 feet from the top of this steep slope.

The area between the house and steep slope has been cleared and is mostly bare soil except for sporadic weed growth. This area slopes gradually toward the west at an inclination of 3H:1V (Horizontal:Vertical) to 5H:1V. Near the top of the slope we observed a short wall composed of old railroad ties that is up to 2 feet tall.

We observed that all roof drains are connected to underground piping. We could not determine where the roof drains discharge to, but likely they connect to the City of Bellevue storm sewer.

The steep slope is about 15 feet tall and inclined at 75 to 100 percent. We observed the slope was moderately vegetated with cedar trees, madrone, ivy, juniper, and laurel bushes. From your property, we observed no evidence of instability on the steep slope such as bowed or leaning trees, tension cracks, or slumps. We also did not observe any groundwater seepage or evidence of erosion on the slope.

We interpreted subsurface conditions at the site based on review of available geologic mapping. Geologic mapping indicates the site to be underlain by Vashon glacial till (Derek B. Booth, Kathy A. Troost, and Aaron P. Wischer, *Geologic Map of King County, Washington,* March 2007). The glacial till deposit typically consists of dense to very dense sand with various amounts of silt and gravel.

CONCLUSIONS

The existing residence is located next to a property that has a steep slope according to City of Bellevue mapping and our site observations. The existing house, which is over 40 years old, meets the City code requirement of a 50-foot steep slope critical area buffer from the top of the steep slope; however, the new deck is located within the buffer. Based on our review of available geologic mapping, we infer that foundations for the existing house and deck are likely bearing on dense glacial till. In our opinion, the zone of influence from the deck pad foundation loads projected at a 2H:1V descending plane would not add a surcharge to the slope and impact current stability. The steep inclination and lack of evidence of instability of the west-facing slope is consistent with a slope composed of dense glacial till at relatively shallow

depths. In our opinion, modification of the steep slope buffer may be allowed to replace the existing deck with a new deck. From a geotechnical standpoint, the planned deck replacement within the buffer will not increase the threat of the geological hazard to adjacent properties or adversely impact other critical areas. The planned deck replacement has been designed so that the hazard to the project is unchanged from the existing condition and will not impact the stability of any existing structures. Based on review of current plans, we understand that the planned deck replacement has been designed by a Washington State licensed structural engineer in accordance with current code and is considered safe as designed and under the anticipated subsurface conditions.

CLOSURE

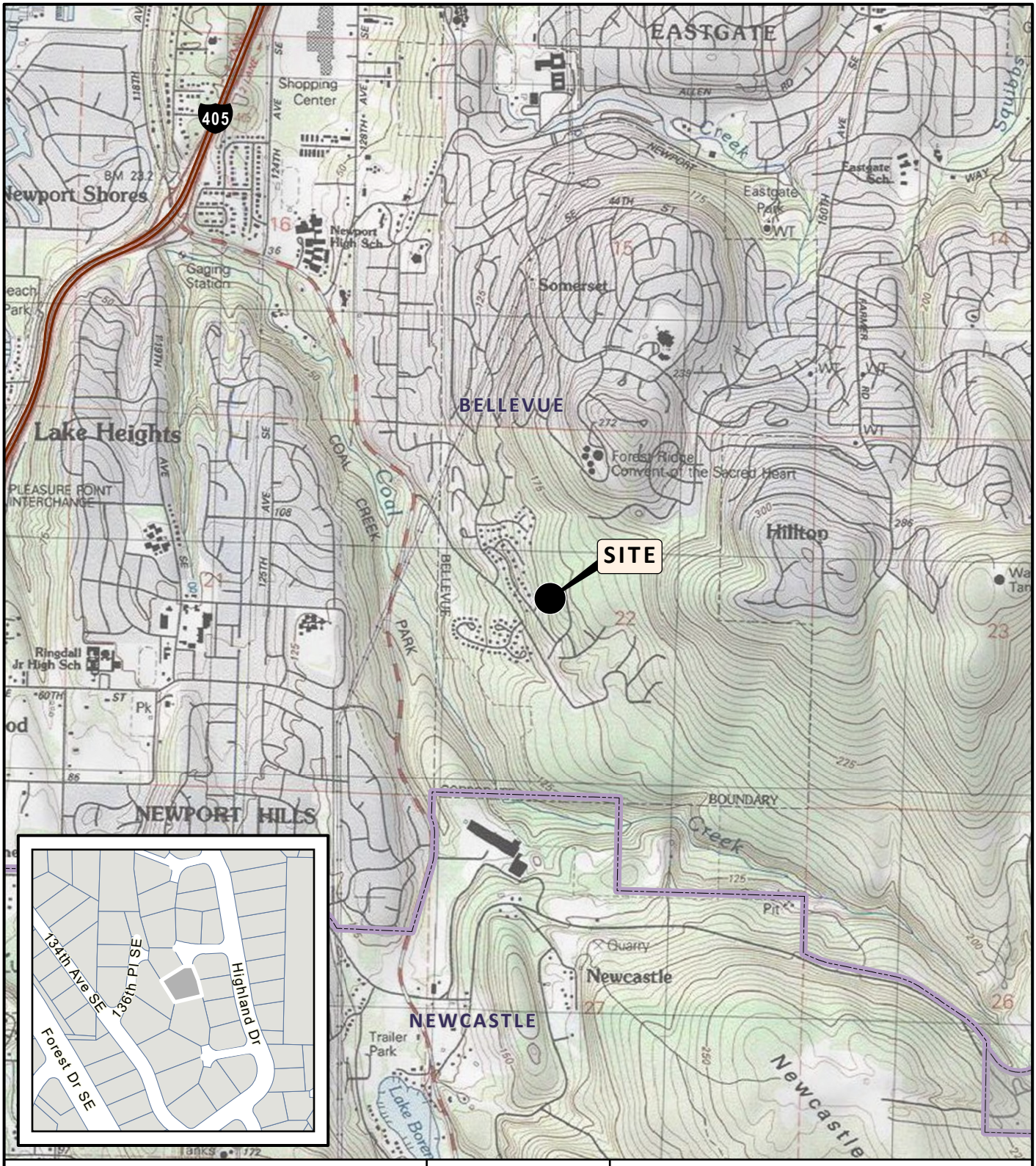
We trust this letter-report meets your current needs. Should you have any questions, please contact us at your convenience.

Sincerely,
ASSOCIATED EARTH SCIENCES, INC.
Kirkland, Washington

Bruce L. Blyton, P.E.
Senior Principal Engineer

Stephen A. Siebert, P.E.
Associate Geotechnical Engineer

Attachments: Figure 1: Vicinity Map
Figure 2: Site Plan
Appendix: Site Photos



DATA SOURCES / REFERENCES:
USGS: 7.5' SERIES TOPOGRAPHIC MAPS, ESRI/I-CUBED/NGS 2013
KING CO: STREETS, CITY LIMITS, PARCELS, PARKS 3/20
LOCATIONS AND DISTANCES SHOWN ARE APPROXIMATE

N

0 2000
Feet

NOTE: BLACK AND WHITE REPRODUCTION OF THIS COLOR ORIGINAL MAY REDUCE ITS EFFECTIVENESS AND LEAD TO INCORRECT INTERPRETATION

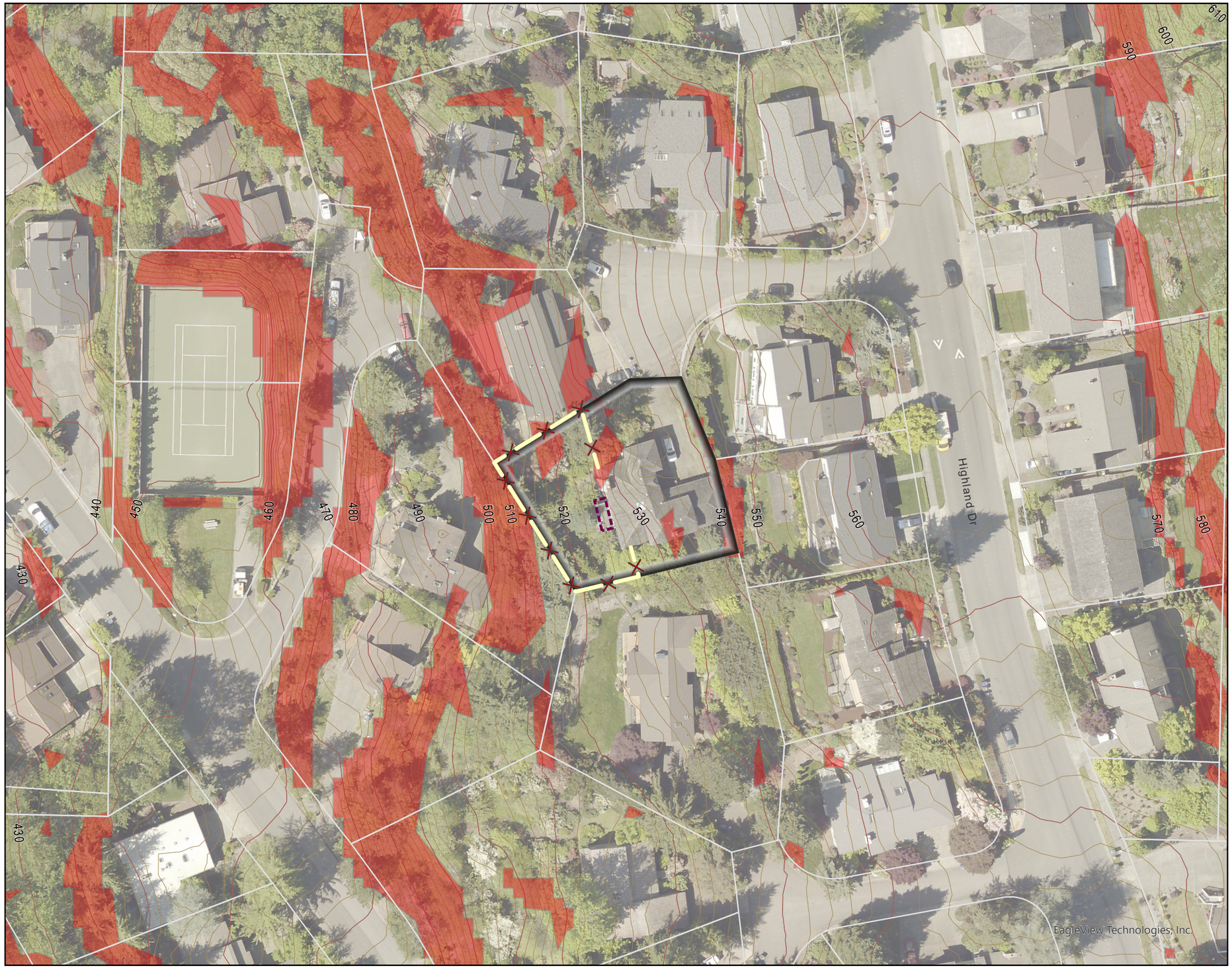
associated earth sciences incorporated

VICINITY MAP

CHAFFEE PROPERTY IMPROVEMENTS
BELLEVUE, WASHINGTON

PROJ NO.	DATE:	FIGURE:
20200315E001	10/20	1

\\kirkfile2\GIS\GIS_Projects\aaY2020\200315 Chaffee Property Improvements\aprx\20200315E001 F1 VM_Chaffee.aprx | 20200315E001 F1 VM_Chaffee | 10/8/2020 3:34



LEGEND

- SITE
- NEW 6' WOOD FENCE
- NEW DECK
- PARCEL
- CONTOUR 10 FT
- CONTOUR 2 FT

DATA SOURCES / REFERENCES:
PSLC: KING COUNTY 2016, GRID CELL SIZE IS 3'.
DELIVERY 1 FLOWN 2/24/16 - 3/28/16
CONTOURS FROM LIDAR
CITY OF BELLEVUE STEEP SLOPES 2018
KING CO: STREETS, PARCELS, 3/20
AERIAL PICTOMETRY INT. 2019

LOCATIONS AND DISTANCES SHOWN ARE APPROXIMATE

N

0 60

FEET

BLACK AND WHITE REPRODUCTION OF THIS COLOR ORIGINAL MAY REDUCE ITS EFFECTIVENESS AND LEAD TO INCORRECT INTERPRETATION

associated earth sciences incorporated

LIDAR BASED TOPOGRAPHY STEEP SLOPES

CHAFFEE PROPERTY IMPROVEMENTS BELLEVUE, WASHINGTON

PROJ NO.	DATE:	FIGURE:
20200315E001	5/21	2

G:\GIS_Projects\aaY2020\200315 Chaffee Property Improvements\aprx\20200315E001 F2 Slopes_Chaffee.aprx | 20200315E001 F2 Slopes_Chaffee | 5/21/2021 12:47 PM

APPENDIX

Site Photos

Photo 1 – New deck construction in progress looking east

Photo 2 – New deck construction in progress showing temporary wood framing

Photo 3- New deck construction in progress showing support posts and pad footings

Photo 4 – Backyard looking west toward steep slope

Photo 5 – Steep slope looking west and down toward adjacent neighboring property